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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,252	07/23/2003	Lawrence E. Gibson	200208191-1	1022

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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RAYFORD, SANDRA M

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/626,252

Applicant(s)

GIBSON ET AL.

Examiner

Sandra M. Nolan-Rayford

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**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 27 June 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: None.  
Claim(s) rejected: 1-19 and 21-36.  
Claim(s) withdrawn from consideration: None.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: (See the attachment.).  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

*S.M. Nolan-Rayford 7-3-05*

**ATTACHMENT TO ADVISORY ACTION**

***Claims***

1. Claims 1-19 and 21-36, as recited in the 24 January 2005 response, are pending.  
Claim 20 has been cancelled.

***Comments and Translation Entered***

2. The comments in the 27 June 2005 response, along with the English translation of Kokai No. 6-183000 (applied as "the '000A abstract" in the 21 October 2004 and 29 April 2005 office actions), have been entered in the record.

***Rejection Maintained***

3. The 35 USC 103 rejection of claims 1-19 and 21-36 as unpatentable over the '000A abstract in view of Ishida et al (US 5,229,438), as recited in section 8 of the 29 April 2005 office action ("the last office action"), is maintained.

***Response to Arguments***

4. Applicant's arguments filed in the 27 June 2005 response ("the last response") have been fully considered but they are not persuasive.

The examiner will not provide detailed responses to the arguments set out on pages 3-8 of the last response.

Instead, she will provide a summary of the base claims and how the prior art teaches/suggests them.

Applicants' base claims can be summarized as follows:

Claim 1 calls for a fluid ejection cartridge comprising:

- a substrate carrier,
- a substrate with a fluid ejector actuator on it, and [cont'd]

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-a two-part adhesive comprising:

-a phenolic glycidyl ether epoxy resin and

-3-aminomethyl-3,5,5-trimethyl-1-cyclohexylamine as a hardener.

Claim 33 calls for a fluid ejection cartridge comprising:

-a substrate having means for ejecting a fluid,

-means for supporting that substrate, and

-means for adhering the substrate to the supporting means,

wherein the adhering means includes a two-part epoxy adhesive comprising

3-aminomethyl-3,5,5-trimethyl-1-cyclohexylamine as a hardener.

Note: The phrase "fluid ejection cartridge" is deemed to mean "inkjet cartridge" or "inkjet head".

As best understood by the undersigned, the base claims of this case deal with an inkjet head/cartridge that includes two substrates [one of which may be a supportive substrate] that are bonded using a two-part epoxy adhesive, which adhesive contains a specific hardener.

The Ota ('000A) and Ishida references render this inkjet head/cartridge unpatentable because:

Ota teaches an inkjet head (title) that employs a two-part epoxy resin as an "angle filling member" (see pars. 0012 and 0013, on pages 7 and 8, respectively, of the translation supplied with the last response) "in the part joining the ink channel and the nozzle plate" (see the last two lines of "(Claim 1)", at page 2 of the translation).

[Emphasis added.]

The examiner interprets "joining" to mean adhering.

Ishida teaches diamines in two-part epoxy adhesives that contain "isophorone diamine" (col. 4, lines 55-56) or other cycloaliphatic diamines (col. 2, lines 37-39) as

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curing agents. Bisphenol A- and bisphenol F-based epoxy resins [per applicants' claims 18 and 19] are taught at col. 3, lines 8-21. Mixed bisphenol epoxies [per applicants' claim 21] are recited at col. 3, lines 22-27. Silanes and thixotropes are shown at col. 5, lines 20-69. Ishida's adhesives cure quickly (col. 1, line 7).

A "curing agent" is deemed to be a hardener. Also, "isophorone diamine" is the common name for the compound "3-aminomethyl-3,5,5-trimethyl-1-cyclohexylamine" (see par. 0019, at page 8 of applicants' specification).

The analogousness of the references is clear. Both deal with epoxy resins and their use to adhere things together.

The examiner posits that the use of the epoxy adhesives of Ishida in the inkjet head of Ota is an obvious way to make them in order to cure the adhesives quickly.

The quick curing of adhesives during inkjet head production is desirable because it shortens manufacturing time.

The arguments submitted in the last response have been considered. However, the concept of employing fast-curing epoxy adhesives when joining or adhering substrates used in an inkjet head/cartridge is still deemed obvious in view of the combined teachings of Ota and Ishida.

The limitations of claims 2-19 and 34-36 are to structures/functions of the printing devices that employ the claimed cartridges. They have no bearing on the patentability of claim 1, claim 33, or claims dependent thereon.

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Finally, applicants' arguments concerning the alleged structural differences between the claimed inkjet cartridges and the inkjet heads suggested by the combined references are not persuasive when the basic concept of adhering surfaces with the adhesive compositions recited in the claims is taught/suggested by the combination.

**Conclusion**

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can be reached Monday through Thursday, from 6:30 am to 4:00 pm, ET.

If attempts to reach the examiner are unsuccessful, contact her supervisor, Harold Pyon, at 571/272-1498.

The fax number for patent application documents is 703/872-9306.

*S.M. Nolan-Rayford*  
S. M. Nolan-Rayford 7-2-05  
Primary Examiner  
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